



ROLE OF SHATPUSHPA CHURNA IN INFERTILITY ANOVULATORY CYCLE

Jyoti B. Bhagile^{1*} and Vishnu Sonune²

¹Lecturer, Streerog and Prasutantra, ASPM, Ayurvedic College Buldana.

²Reder, Balrog Dept. ASPM, Ayurvedic College Buldana, Maharashtra.



***Corresponding Author: Dr. Jyoti B. Bhagile**

Lecturer, Streerog and Prasutantra, ASPM, Ayurvedic College Buldana.

Email ID:

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INTRODUCTION

Fertility is the capacity of a couple to reproduce or the state of being fertile. Reproduction is the process that requires the interaction and the integrity of the female and male reproductive tracts. The couple who has not conceived after 12 months is the lowest reference limit for time to pregnancy (TTP) by the World Health Organization. Among the causes of infertility, ovarian factor overall contributes 20% and 15% in primary and secondary infertility respectively where as in females, it contributes 40%. Ovarian dysfunction encompasses anovulation or oligoovulation, corpus luteum insufficiency, luteinised unruptured follicle. Modern medical treatment for anovulation i.e. failure to produce mature ovum includes hormonal therapy, In Vitro Fertilization (IVF), Embryo Transfer (ET), Gamete Intra Fallopian Transfer (GIFT) etc., but they have unsatisfactory results, enormous expenses and lots of side effects like ovarian hyper stimulation, frequent abortion, multiple gestations and major long term possibility of ovarian cancer. There is a need of time to evaluate some alternative medicine in infertility due to anovulation. While referring the Samhitas, the single drug found which can be helpful in such cases is Shatpushpa. Indication of use of Shatpushpa given in Kashyapsamhita directly points out its utility in ovulatory dysfunction. To ascertain effectiveness of Shatpushpa, an attempt was made by reviewing previous research works which were carried out in anovulatory factor of infertility with the use of Shatpushpa in different dosage forms.

LITERARY REVIEW

Detail description of the drug

- 1) Shatapusha
- 2) Botanical Name: Anethumsowa.
- 3) Family: Umbelliferae
- 4) Paryaya: Chhatra, Shatahwa, Madhura, Pitika
- 5) Swarupa: It is a kshupa having 1'-2' height.
- 6) Habitat: All over India.
- 7) Part used: Dried Fruit
- 8) Vernacular names: English: Indian Dil Fruit, Dill, Dill seed, Garden dill Rasa Panchaka:

Rasa: Katu-tikta,

Guna: Laghu, snigdha, tikshna Virya :Ushna.

Vipaka: Katu.

Doshaghnata: Kaphavata shamaka.

Chemical constituents

Dihydrocarvone, carvacrol, safrole and thymol, safrole pinene, dphellandrene, dillapiol, d phellandrene, -terpinene, carvone, caryophyllene, myristicin, eugenol, anethofuran (Essential oil); carvone, (+) limonene (Dill oil); glyceryl esters of saturated and unsaturated fatty acids, vicenin (6,8-di-cglucosyl- 5,7,3'-trihydroxy-flavone), xanthone glycoside-dillanoside (Fruits); tripetroselinin, petroselinicdioleoin, dipetroselinicolein,

dillapional (seed oil); benzodipyrangraveolone, carvone (Plant); carvone, dihydrocarvone, carvacrol, methyl benzoate, 1,5-cineole.

Karma and Prayoga

Due to ushnaand tikshnagunait acts as kaphavata shamaka. It has deepana, pachana, anulomanand krimighna (Vermicide) properties so; it is used in aruchi (Loss of appetite), vama (Vomiting), agnimandhya (Achlorhydria), ajeerna (Indigestion), udarshoola (Abdominal pain), krimi (Worms), etc. In female reproductive system it acts as artavajanana (Helps in commencement of menstruation) and stanyajanana (Production of milk). So it has good effect on rajorodha, yonishoola, kastartava, prasuta and stanyanasha. Experimental studies reveals its uterine stimulant activity. Sowa seeds are dry and of heat producing potency, koshavatahara, mutrajanana, artavajanana (Diuretic & Amenagogue). It is used in abdominal colic, abdominal distension and sandhishoola.

DISCUSSION

There is no direct description of anovulation in ayurvedic texts but certain words found in our texts can be correlated with anovulation i.e. Nashtartava, Abeejam,

Nashtabeejam. Probable Tridoshic involvement in the Ovarian cycle: The process of development and enlargement from primordial follicles to the Graffian follicle is said to be due to Kapha, as one of the function of Kapha is Upachaya which means development. Pitta is responsible for all type of Paka Karma in the body, so here, the role of Pitta can be understood as maturation of graffian follicle and conversion of androgens into estrogens (Aromatization). Differentiation or separation and then expulsion are also the functions of vata. So, here Vata is responsible for the rupture of follicle and thus for main event – ovulation. These are the normal functioning of Doshasbut, if there is vitiation of Kapha, there is no proper development of follicles. Vitiated Vata causes premature luteinization of follicles and thus causes anovulation.

Here, the function of Pitta is somewhat suppressed by Vata and Kapha, so there is reduced rate of aromatization (Pitta being not enough to convert increased androgens into estrogens causing androgen excess) and no maturation of follicles occurs.

Hormonal imbalance first disturbs ovarian cycle which later on reflects by menstrual cycle.

Possible mode of action

By the virtues of Katu-Tikta Rasa, Ushanaveerya, Kaphavataghna and Agnivardhana Guna, it helps in Amapachana and thus Rasadhatu Shudhi i.e. proper formation of Rasa dhatu.

Being upadhatu of Vatanuloma kGuna. Artava Nishkraman isasa, formation of Artava is maintained properly. Moreover, Shatpushpa is having Vatanulomak Guna. Artava Nishkraman is regularized by ApanaVata. With the regulation of Apanavataby Shatpushpa, regularization of menstrual cycle is maintained. Shatapushpa mainly contains phytoestrogens. Phytoestrogens have mixed estrogenic and anti-estrogenic action, depending on target tissue.

Phytoestrogens may be either able to affect the endogenous production of estrogens. The pituitary gland releases gonadotropins that stimulate estrogen synthesis in the ovaries. Recent report indicate that phytoestrogen exert their effect in a selective estrogen receptor modulators (SERM). Through this SERM like action they act as both oestrogen agonists and antagonists. They inhibit the enzymatic conversion of endogenous oestrone to oestradiol and also possess intrinsic oestrogenactivity. Shatapushpa by its phytoestrogenic properties brings down the levels of insulin resistance in the body and restore the cellular imbalance that is a major cause of PCOS.

CONCLUSION

Modern management of infertility due to anovulation is associated with many hazards. Ayurveda science with its

proven track record is helpful in female infertility. Indications of Shatpushpa mentioned by Acharya Kashyapa are closely related to infertility related to ovarian dysfunction. The previous researches clearly show Shatpushpa has significant effect in the process of ovulation when given by different dosage forms like nasal, anal, oral and intrauterine route. More researches are needed to evaluate the effect of shatpushpa given in massage form. No work has been carried out for unique administration of Shatpushpa Kalp which should be further evaluated in context of anovulation.

REFERENCES

1. Cooper TG., Noonan E, Non Eckardste in et al. world Health Organization reference values for human semen Characteristics Human Reprod, 2010; 16(3): 231-45.
2. Bhattacharyas infertility in Dewhurts textbook of obstetric & Gynaecology by D.Keith Edmonds, 2007; 7, 45: 440-460.
3. Lavekar GS. et al. Database on Medicinal Plants Used in Ayurveda, Central Council for Research in Ayurveda & Siddha, New Delhi, India, 2007; 8: 349.
4. BhavaprakasaNighantu of Sri BhavaMisra by Sri BrahmasankaraMisra, First Part published by Chaukhambha Sanskrit Sansthan; Varanasi. Haritakyadi Varga, 2007; 11, 35: 89-92.
5. LavekarGS. et al. Database on Medicinal Plants Used in Ayurveda, Central Council for Research in Ayurveda & Siddha, New Delhi, India, 2007; 8: 349.
6. Jana S., Shekhawat G. Anethumgraveolens: an indian traditional medicinal herb and spice. Pharmacognosy Reviews, 2010; 4(8): 179– 184. doi: 10.4103/0973-7847.70915. [PMC free article][PubMed].